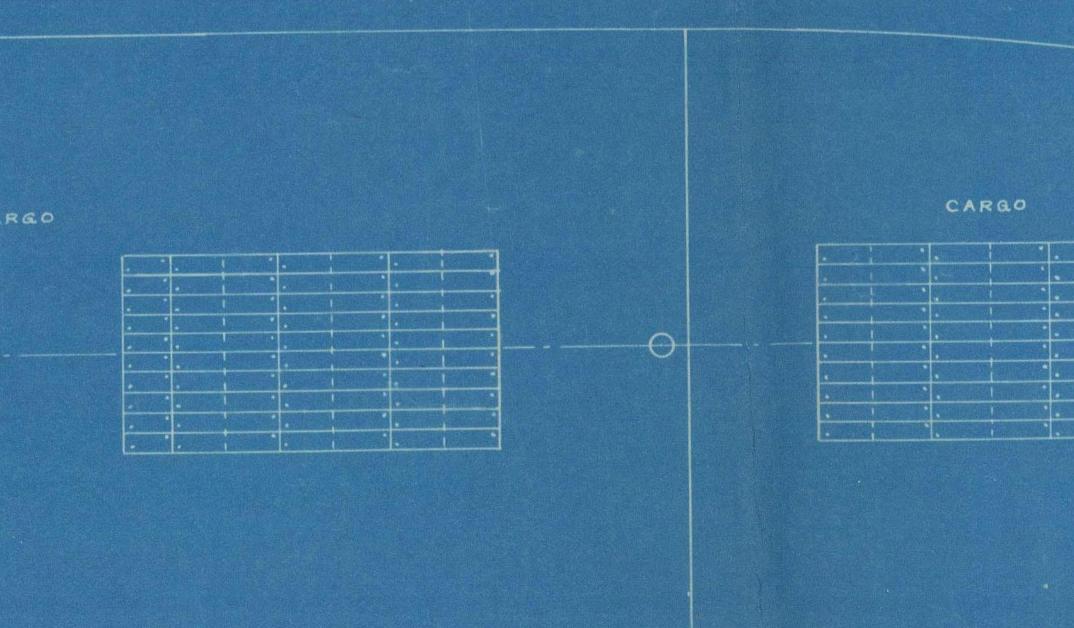
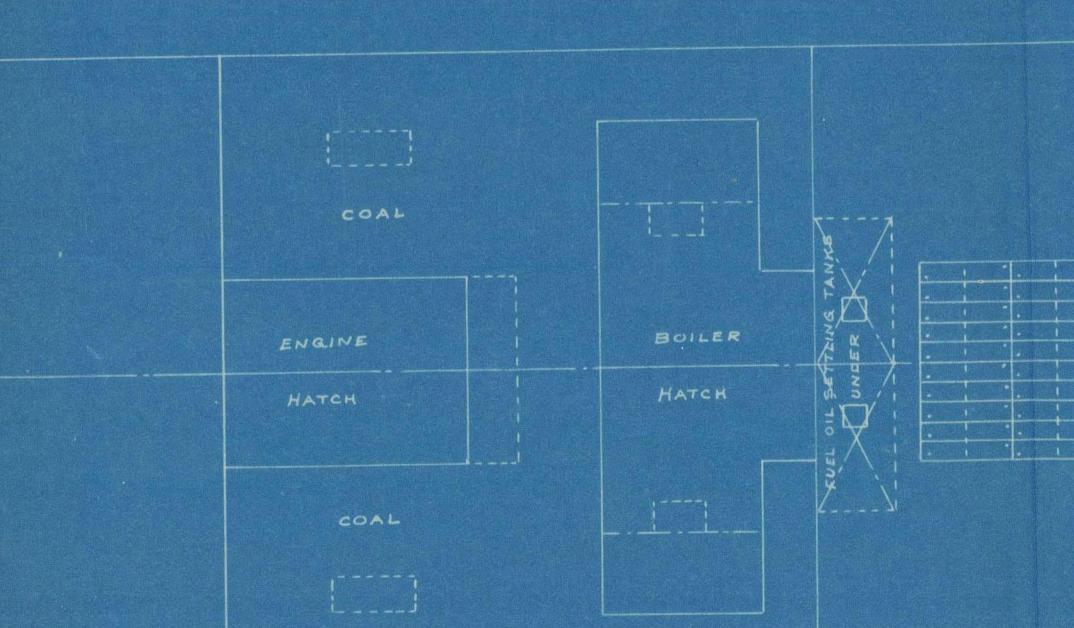
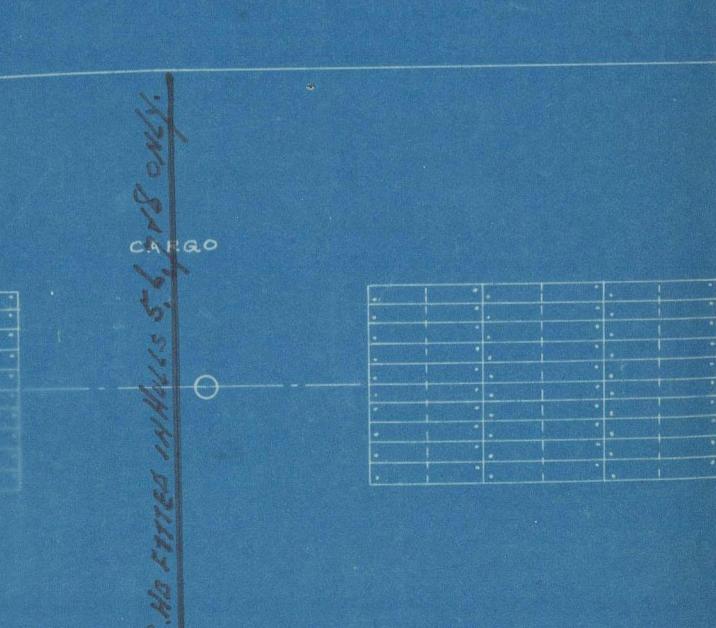
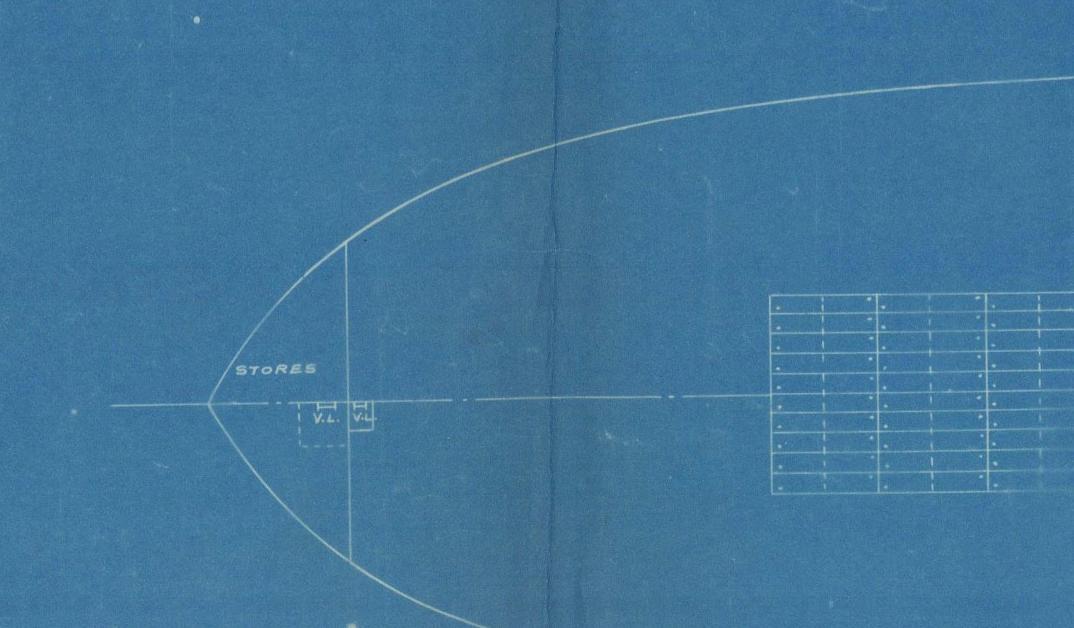
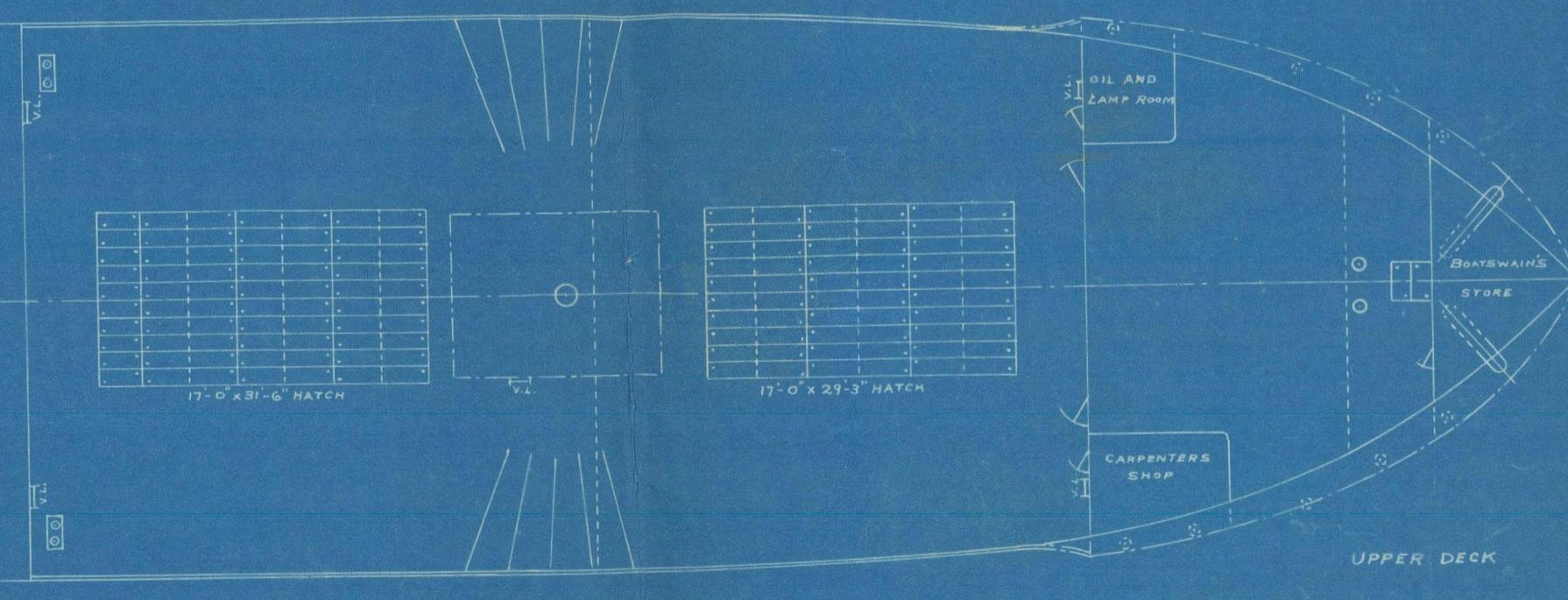
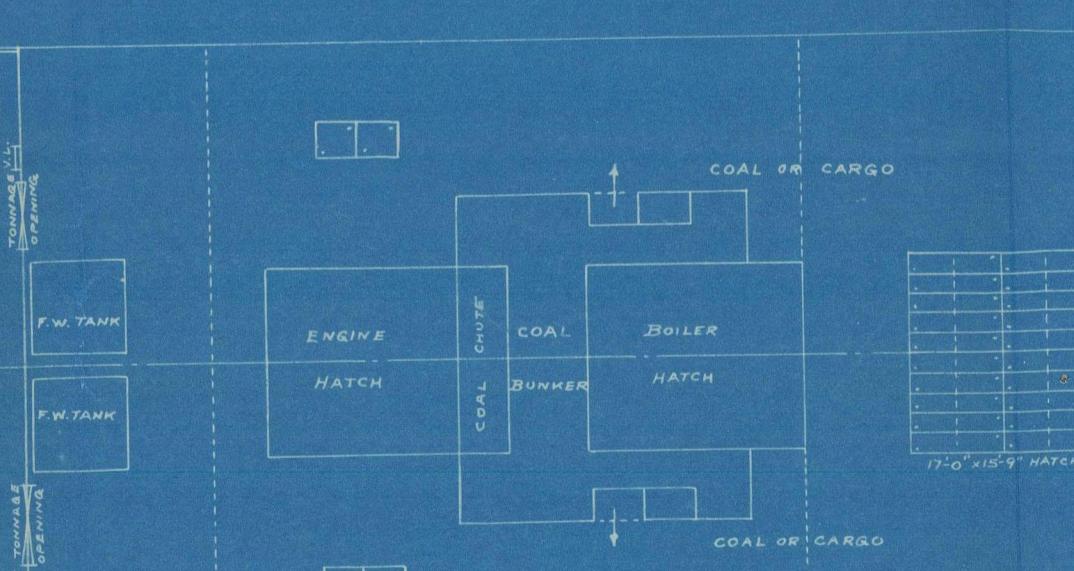
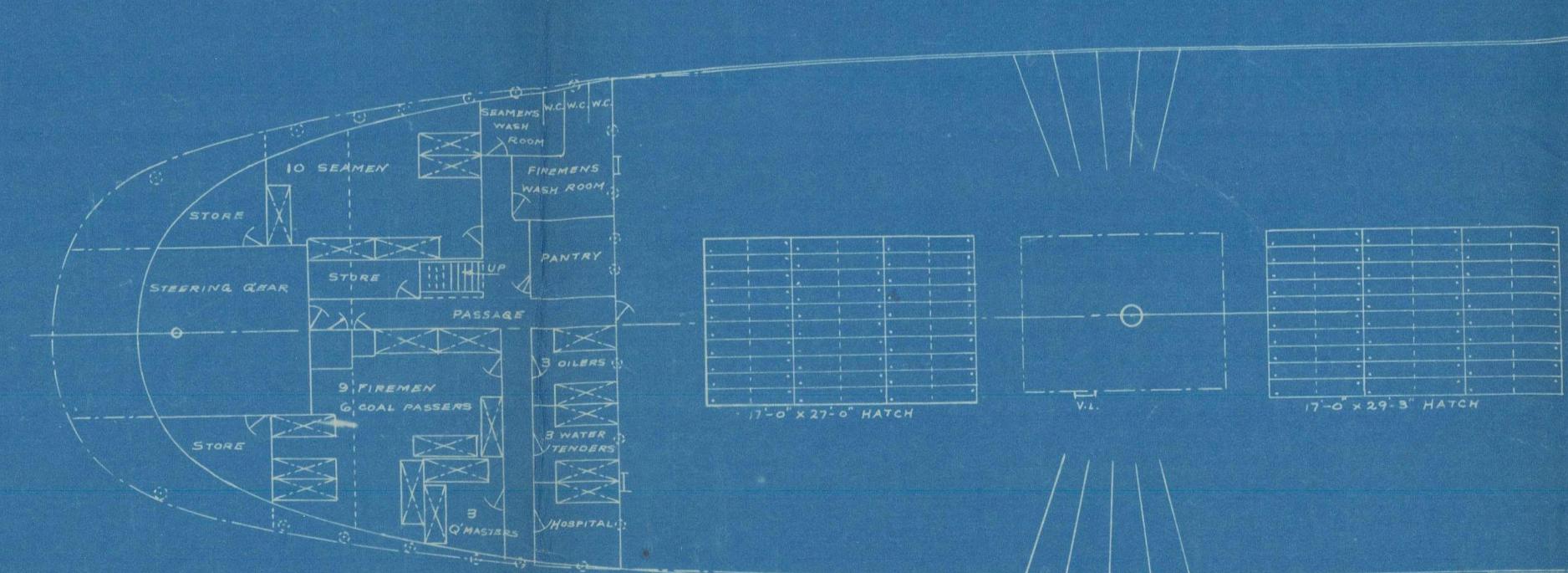


**GENERAL PARTICULARS**

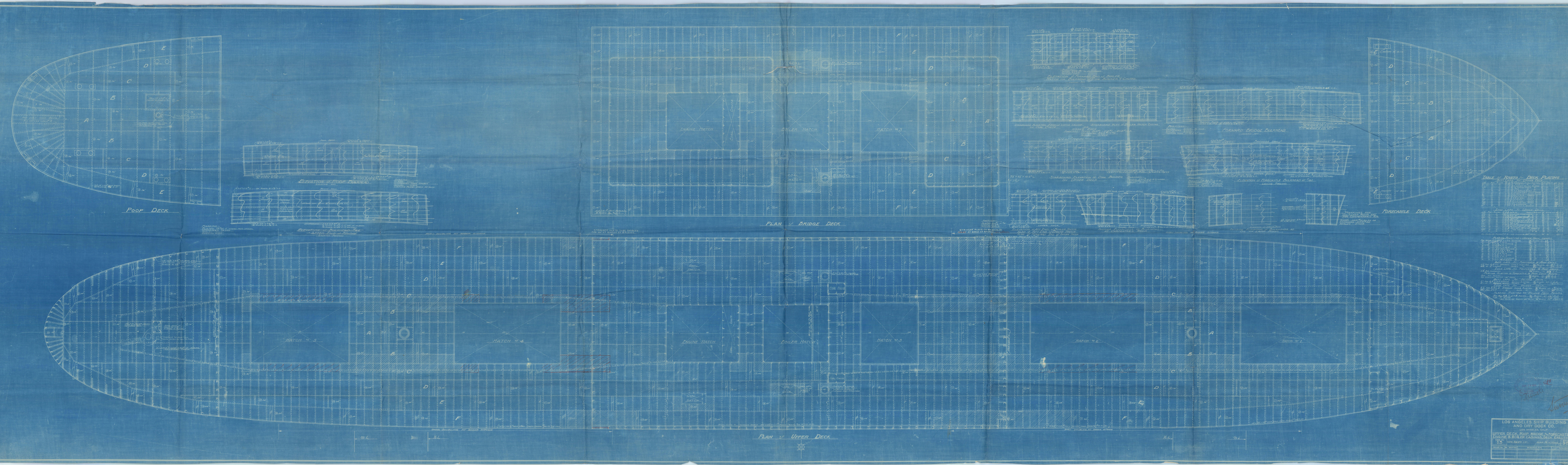
LENGTH OVERALL	423'-0"
LENGTH BETWEEN PERPS.	410'-0"
BEAM MOULDED	34'-0"
DEPTH MOULDED	29'-0"
DRAFT LOADED	24'-2"
DEADWEIGHT	ABOUT 8800TONS
SPEED	10 KNOTS
CUBIC CAPACITY (GRAIN)	40000 CUBIC FT
CUBIC CAPACITY (BALES)	432000 "
FUEL OIL	1050 TONS
COAL BUNKER (PERMANENT)	420 "
COAL BUNKER (RESERVE)	300 "
GROSS TONNAGE (AMERICAN) ABOUT	5750 TONS
NET TONNAGE	3880 TONS

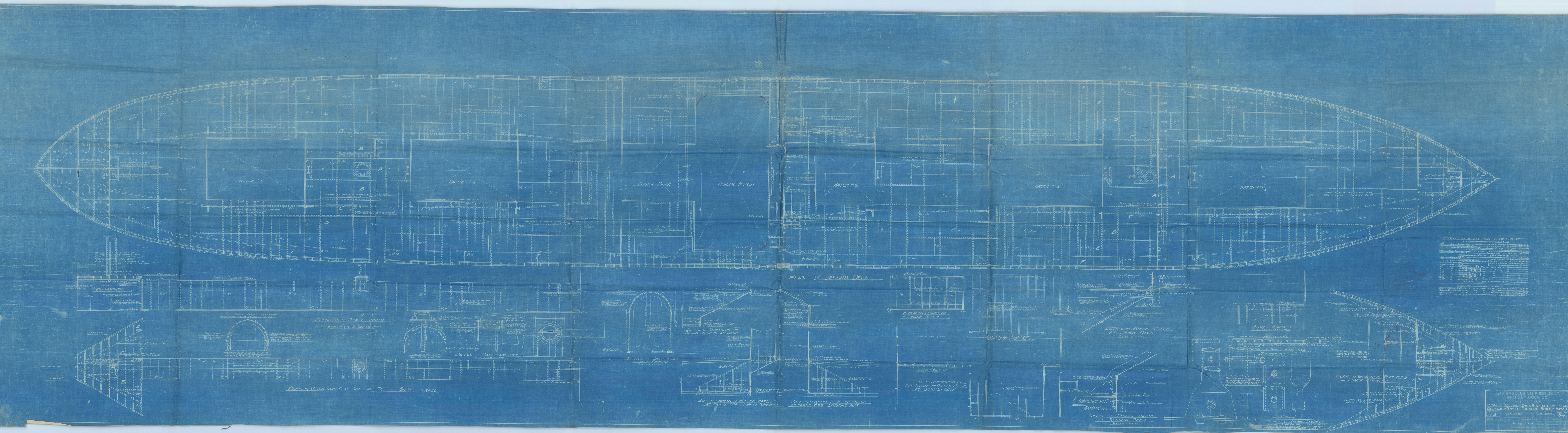


LOS ANGELES SHIP BUILDING AND DRY DOCK CO. LOS ANGELES, CALIF.			
STEEL CARGO STEAMER 8800TONS DW GENERAL ARRANGEMENT			
CASE No.	DATE	SCALE	SHEET NO.
ORDER No.	No. WANTED	DESIGNED FOR	REMARKS

Approved  
Theo. G. Ferris  
May 1917







S.S. "WEST ZULU"  
Midship Section  
of vessel as built  
— Hull No 7 —  
Los Angeles S.B. State  
San Pedro  
(Port of Los Angeles)  
California



006204-006220-0294

D

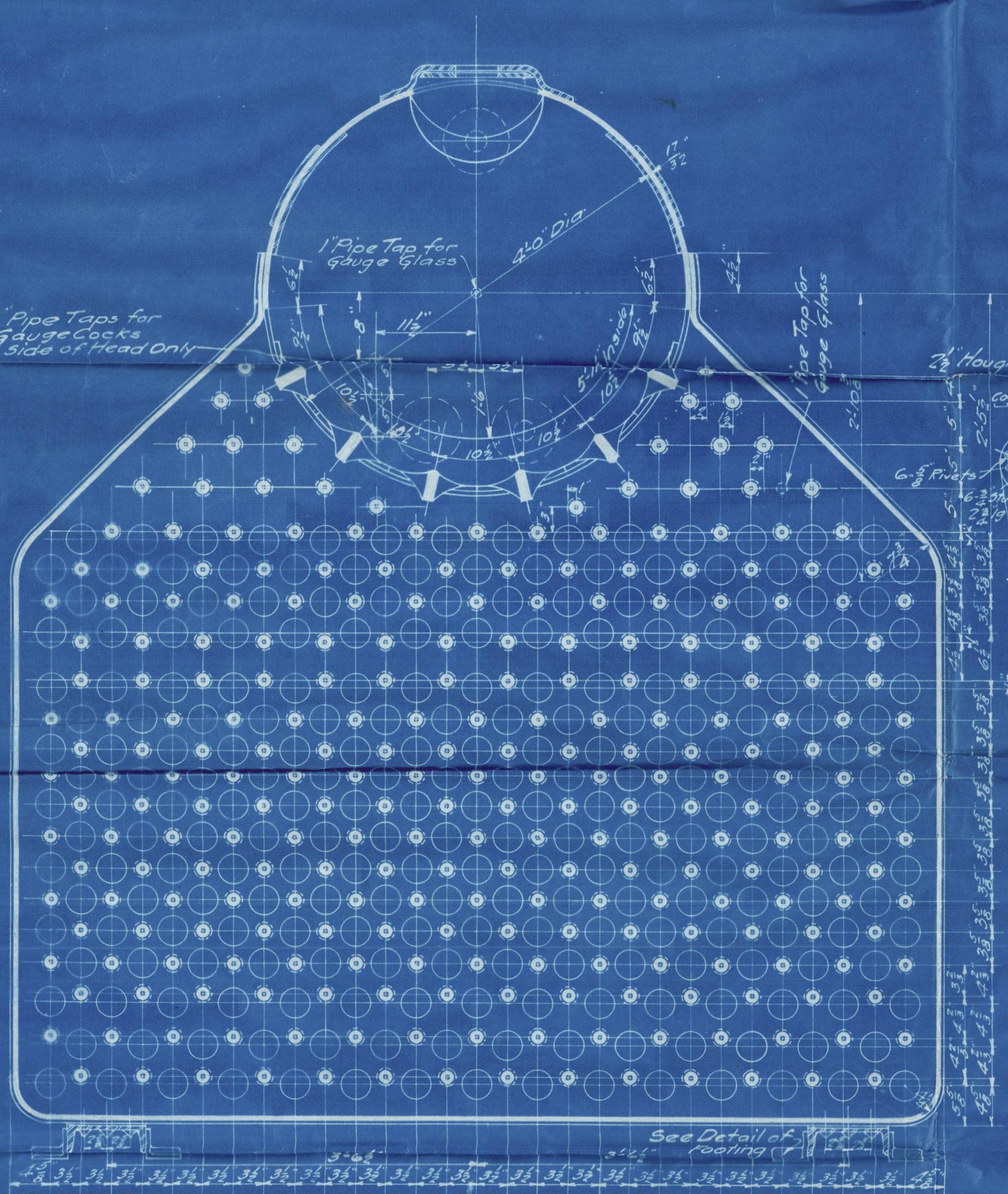
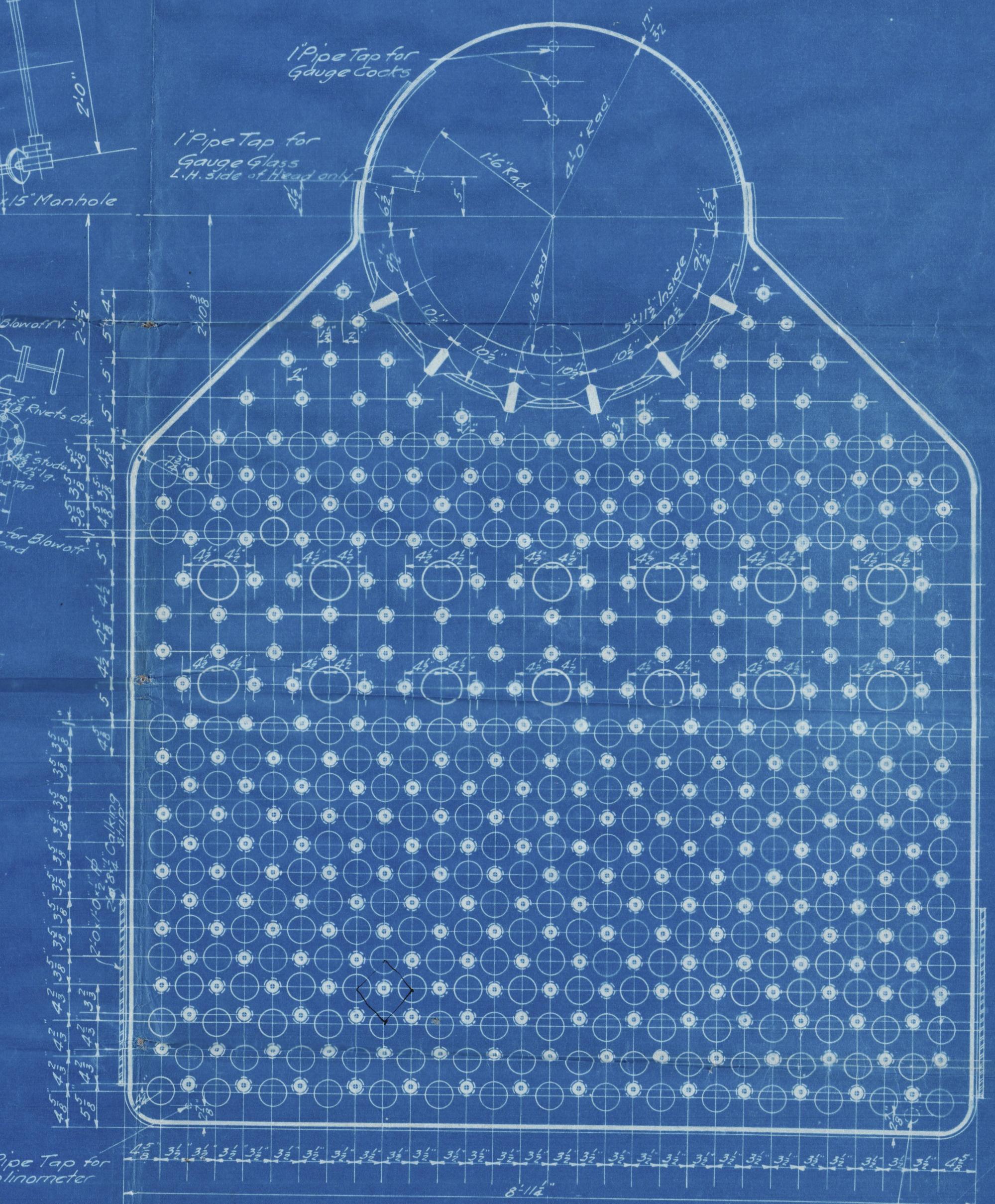
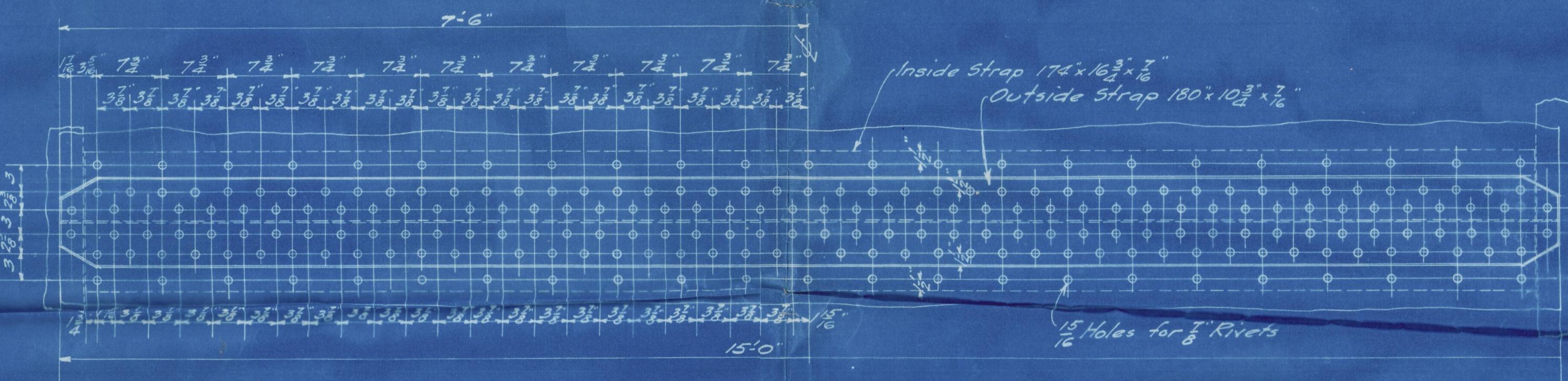


WORKING PRESSURES U.S. RULES		
Name	Size	Working Pressure lbs. per sq. in.
Shell	$\frac{17}{32}$ "	$\frac{58000 \times .5313}{6 \times 24} = 214$
Tube Sheet	$\frac{17}{32}$ "	$\frac{120 \times 8.5^2}{5 \times 7} = 247.7$
Stay Bolt	$\frac{19}{16}$ dia $\frac{3}{4}$ Hole	$\frac{1.476 \times 6000}{5 \times 7} = 253.5$
Circular Seam	$\frac{11}{16}$ " Rivet Hole	$\frac{8866 \times 58000 \times 23}{2.6875 \times 6 \times 12 \times 28} = 218$
Long. Seam	$\frac{15}{16}$ " Rivet Hole	$1 \times 6.903 + (4 \times 6.903 \times 1.75) \times 58000 \times \frac{23}{7.75 \times 24 \times 6 \times 28} = 235.7$
Heads	$\frac{5}{8}$	$\frac{6875 \times 58000}{24 \times 5} = 332$
Throat Stay	$\frac{35}{16} \times \frac{11}{16}$	$\frac{3.5 \times 1.0625 \times 7000}{10.5 \times 12} = 206.6$
" " Rivets	$\frac{17}{16}$ " Rivet Hole	$\frac{4 \times 8866 \times 58000 \times 23}{10.5 \times 12 \times 6 \times 28} = 223.5$

Boiler Working Pressure 200\*

Note.—Above table based on ultimate tension of 58000 lbs. per in. factor of safety 6. Shearing value  $58000 \times \frac{23}{28}$

Note  
Handholes punched  $2\frac{5}{8}$ " dia. annealed, and reamed to  $3\frac{5}{8}$ " dia.  
Tubeholes "  $2\frac{5}{8}$ " " " " to  $3\frac{17}{32}$ "  
Staybolt holes "  $1\frac{1}{16}$ " " " " to  $1\frac{9}{16}$ " and  
tapped  $1\frac{1}{16}$ " -  $1\frac{1}{2}$  threads per in.  
Rivetholes punched  $\frac{1}{4}$ " small and reamed to size.  
ording to page 4, Fourth Suplement to General Rules and  
ulations, Circular letter May 22, 1917, Steamboat Inspection  
ervice.



200<sup>\*</sup> Working Pressure

EINE SAFETY BOILER CO.	
BOILER DETAILS	
Mr HEINE, MARINE BOILER made for Los Angeles Shipbuilding & Dry Dock Co. Los Angeles Calif. 2-247-12	
IRON BY N.Z. CUT BY N.Z.	PHOENIXVILLE, PA. 9/13/17
REvised DATE	
III-22-P	